

PRODUCTION OF AEROSOL COMPOSITION

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Abstract of JP6092841

PURPOSE:To provide the production process of aerosol which keeps homogeneity even after long-range storage, hardly causes phase separation, can take out the homogeneous content without shaking every on use and induces no skin defatting and skin irritation. **CONSTITUTION:**The objective composition is composed of a solution comprising (A) 30 to 85wt.% of the oil component or a combination thereof with the alcohol component and (B) 15 to 70wt.% of water and (C) dimethyl ether. The amounts of the solution and dimethyl ether are set to 2 to 60 pts.wt. and 40 to 98 pts.wt. based on 100 pts.wt. of the total, and (A) and (B) are mixed at first and, then (C) is admixed.

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CLAIMS DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF
THE INVENTION TECHNICAL PROBLEM MEANS EXAMPLE

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CLAIMS

[Claim(s)]

[Claim 1] (A) The undiluted solution which consists of an oil component or an oil component, 30 - 85 % of the weight of alcoholic components, and 15 - 70 % of the weight of (B) water, And it consists of (C) wood ether and is the total quantity 100 of said undiluted solution and wood ether. The rate of an undiluted solution to the weight section 2 - 60 weight section, The process of the aerosol constituent characterized by mixing the aforementioned (C) component to this after making the rate of wood ether into 40 - 98 weight section and mixing the aforementioned (A) component and the aforementioned (B) component.

[Claim 2] The process of the aerosol constituent according to claim 1 which is at least one sort chosen from the group which an oil component becomes from fatty acid ester, silicon oil, the oil solubility pharmacological activity matter, vegetable oil, and animal oil.

[Claim 3] The process of the aerosol constituent according to claim 1 or 2 whose alcoholic components are ethanol and/or isopropanol.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the process of an aerosol constituent. It is related with the process of the aerosol constituent which can be used suitable for cosmetics, drugs, quasi drugs, etc. in more detail.

[0002]

[Description of the Prior Art] Conventionally, oil components, such as synthetic oil and vegetable oil, such as fatty acid ester and silicon oil, and animal oil, are blended with cosmetics for the purpose of the grant of permeability or gloss to the skin, and improvement in a feeling of use. Moreover, oil components, such as a salicylic-acid glycol, acetic-acid dl-alpha-tocopherol, l-menthol, and dl-camphor, are blended with drugs or quasi drugs as a drug effect component.

[0003] However, although it is desirable to blend water in order for there to be a problem that the skin is degreased and to prevent cleaning, when it applies to the skin when propellants, such as liquefied petroleum gas, are blended with these oil component and an alcoholic component and it considers as an aerosol constituent, there is a problem that an oil component etc. and water will dissociate.

[0004] The approach of blending a surface active agent and making it into a water-in-oil type emulsion or an oil-in-water type emulsion as an approach of stabilizing the constituent containing such an oil component, an alcoholic component, and water in the uniform condition, is learned.

[0005] However, the emulsion with which the surface active agent was blended In order for there to be problems, like the stimulus to the stickiness at the time of use or the skin is large and to use it as aerosol further The aerosol constituent which blended propellants, such as liquefied petroleum gas, with this emulsion When saved for a long period of time, contents cause layer separation, it may need to fully shake beforehand at every use, and the problem that it is difficult to apply only the same amount to homogeneity repeatedly is at every use of a drug effect component by drugs especially.

[0006]

[Problem(s) to be Solved by the Invention] This invention is made in view of said conventional technique, and does not have cleaning or skin irritation of the skin, moreover layer separation cannot start it easily, whenever it is use, even if it does not shake, it is uniform and it aims at offering the process of the aerosol constituent which can take out the contents of a desired presentation as it is.

[0007]

[Means for Solving the Problem] Namely, the undiluted solution with which this invention consists of (A) oil component or an oil component, an alcoholic component 30 - 15 - 70 % of the weight of 85-% of the weight and (B) water, And it consists of (C) wood ether and is the total quantity 100 of said undiluted solution and wood ether. The rate of an undiluted solution to the weight section 2 - 60 weight section, After making the rate of wood ether into 40 - 98 weight section and mixing the aforementioned (A) component and the aforementioned (B) component, it is related with the process of the aerosol constituent characterized by mixing the aforementioned (C) component to this.

[0008]

[Function and Example(s)] According to the process of this invention, in an undiluted solution phase, the aerosol constituent which the oil component which carries out layer

separation or an oil component, an alcoholic component, and water dissolved mutually into wood ether at homogeneity is obtained by mixing wood ether by the specific blending ratio of coal to the oil component of the specific blending ratio of coal or an oil component and an alcoholic component, and the undiluted solution that consists of water. [0009] In the process of the aerosol constituent of this invention, the undiluted solution which consists of the (A) component and the (B) component which are explained below is used.

[0010] The aforementioned (A) components are an oil component or an oil component, and an alcoholic component.

[0011] It is desirable that it is a component for said oil component giving the permeability and gloss over the skin, raising a feeling of use, and giving a pharmacological action, and it is at least one sort chosen from the group which this oil component becomes from fatty acid ester, silicon oil, the oil solubility pharmacological activity matter, vegetable oil, and animal oil although there will be no limitation especially if it can use for such a purpose.

[0012] As an example of said oil component, for example Myristic-acid isopropyl, Myristic-acid Millis Chill, myristic-acid octyldodecyl, palmitic-acid isopropyl, Butyl stearate, ethyl linolate, linolic acid isopropyl, Fatty acid ester, such as adipic-acid diisopropyl, diisopropyl sebacate, and sebacic-acid diethyl; A methylphenyl polysiloxane, Silicon oil, such as octamethylcyclotetrasiloxane and decamethyl cyclopentasiloxane; Dl-camphor, L-menthol, a salicylic-acid glycol, a methyl salicylate, the acetic-acid dl-alpha-tocopherol, A eucalyptus oil, a date, lidocaine, crotamiton, diphenhydramine, Oil solubility pharmacological activity matter, such as vitamin oil; Olive oil, an almond oil, Jojoba oil, peanut oil, castor oil, palm oil, palm oil, safflower oil, Sunflower oil, cotton seed oil, an avocado oil, camellia oil, corn oil, a wheat germ oil, Rice bran oil, cacao butter, sesame oil, Oenotherae Biennis oil, safflower oil, a sasanqua oil, soybean oil, Vegetable oil, such as rapeseed oil, a cull navarho, a MAKADEMIAN nuts oil, apricot kernel oil, and a grape seed oil; Lanolin and a lanolin derivative, Animal oil, such as a turtle oil, a mink oil, yellow bees wax, squalene, squalane, pristane, and a yolk oil, etc. is raised, and these are independent, or they mix two or more sorts and are used.

[0013] When an oil component with high viscosity is diluted and two or more sorts of oil components are used, said alcoholic component is a component for mixing and dissolving these in homogeneity, and especially if it can use for such a purpose, it will not have limitation.

[0014] Ethanol, isopropanol, etc. are raised, for example, and ethanol is usually used and can be easy to use native ethanol, various denaturation ethanol, etc. as an example of said alcoholic component. These are independent, or mix two or more sorts and are used.

[0015] Moreover, since said alcoholic component comes to produce layer separation when moisture is contained so much, the concentration of the thing of 95% or more of ***** is desirable [a component] 90% or more.

[0016] (A) the loadings of the alcoholic component in a component -- oil component It is desirable that they are the 3000 or less sections and the 1000 or less section of ***** to the 100 sections (the weight section and the following -- the same). When the loadings of this alcoholic component surpass the 3000 sections, there is an inclination for the effectiveness by having used the oil component to no longer be discovered fully.

[0017] (A) The loadings in the undiluted solution of a component are 40 - 80 % of the

weight preferably 30 to 85% of the weight. In becoming easy to separate the aerosol constituent obtained when the loadings of this (A) component are less than 30 % of the weight and surpassing 85 % of the weight, when an aerosol constituent is applied to the skin, it becomes easy to start cleaning of the skin.

[0018] When the water which is the aforementioned (B) component applies an aerosol constituent to the skin, it is a component for preventing degreasing the skin, there is no limitation especially in this water, for example, purified water, such as distilled water and ion exchange water, etc. can be used for it.

[0019] (B) The loadings in the undiluted solution of a component are 20 - 60 % of the weight preferably 15 to 70% of the weight. When the loadings of this (B) component are less than 15 % of the weight and the aerosol constituent obtained is applied to the skin, in becoming easy to start cleaning of the skin and surpassing 70 % of the weight, it becomes easy to separate an aerosol constituent.

[0020] Within limits from which the purpose of this invention is not prevented other than these (A) components and the (B) component according to an application in various active principles, a solvent, etc., it can be suitably chosen as the undiluted solution used by this invention, and can use for it.

[0021] As an example of said active principle, an astringent active principle, a hair spray active principle, a baby oil active principle, a pawl protection active principle, a hidroscheisis active principle, a hair tonic active principle, an aftershave lotion active principle, a hand lotion active principle, a suntan lotion active principle, a body lotion active principle, an antipruritic active principle, an antiphlogistic sedative drug active principle, a hair tonic active principle, a germicide active principle, perfume, etc. are raised, for example.

[0022] Although the loadings of the active principle in the undiluted solution in the case of using said active principle differ according to the class of the active principle, it is desirable to adjust so that the effectiveness by having blended this active principle may fully be discovered and it may get. Since these loadings have the inclination for compatibility with propellants etc. and stability to fall when many [too], it is preferably desirable to adjust so that it may become about 10 or less % of the weight still more preferably about 15 or less % of the weight.

[0023] As an example of said solvent, polyhydric alcohol, such as propylene glycol, ethylene glycol, diethylene-glycol, triethylene glycol, glycerol, 1, and 3-butylene glycol, etc. is raised, for example.

[0024] As for the loadings of the solvent in the undiluted solution in the case of using said solvent, it is preferably desirable to adjust so that it may become about 15 or less % of the weight still more preferably about 20 or less % of the weight.

[0025] In this invention, wood ether ((C) component) is used as propellants.

[0026] The total quantity 100 of said undiluted solution and wood ether The rate of an undiluted solution to the section is made into the two to 60 section, and the ten to ***** 50 section, and let the rates of wood ether be the 40 to 98 section, and the 50 to ***** 90 section. The total quantity 100 of an undiluted solution and wood ether When an undiluted solution and wood ether separate into a bilayer, and a uniform aerosol constituent is no longer obtained, when the rate of wood ether to the section is the less than 40 sections, and surpassing the 98 sections, while the amount of an undiluted solution decreases too much relatively and it becomes impossible to attain the purpose of

this invention, the amount of wood ether increases relatively and is not desirable in respect of safety.

[0027] In addition, in this invention, hydro fluorocarbon, such as F12, F114, and F134 a, liquefied petroleum gas (mixture, such as a propane, i-butane, and n-butane), etc. can be used as propellants besides said wood ether.

[0028] As for the component used as propellants other than these wood ether, it is desirable to use at 10 or less % of the weight of ***** 20 or less % of the weight of the total quantity which can use in the range which an undiluted solution and propellants do not divide into a bilayer instead of a part of an oil component, water, alcoholic component, and wood ether, and an oil component, water, an alcoholic component, and wood ether can specifically use, in order to deal in the constituent which may discover a desired property.

[0029] In the process of this invention, after dividing into two processes the (A) component and the (B) component which constitute an undiluted solution, carrying out sequential restoration at the proof-pressure container for aerosol and mixing this component, an aerosol constituent is obtained by filling this up with the propellants which are the (C) components, and mixing.

[0030] The 25-degree C internal pressure of the aerosol constituent which what is usually used can be used as said proof-pressure container for aerosol, and is the above, and is made and obtained is -G -G and 3-5kg/cm² of ***** 2-6kg/cm². Adjusting so that it may become is desirable.

[0031] What is necessary is just to usually mix with the (B) component, since these are beforehand mixed to homogeneity when the aforementioned (A) component consists of an oil component and an alcoholic component.

[0032] In addition, when using said active principle and solvent, in the (A) component or the (B) component, it may add beforehand and you may mix, and after these mix the (A) component and the (B) component, it may add and they may be mixed. Moreover, when using together wood ether and propellants other than this wood ether, after mixing propellants other than this wood ether with wood ether beforehand, mixing with an undiluted solution is desirable.

[0033] The aerosol constituent obtained by the process of this invention can be used suitable for broad fields for example, such as cosmetics, drugs, and quasi drugs, since the contents of a uniform presentation can be taken out as it is even if it is homogeneous even if saved for a long period of time, it is hard to start layer separation, and it does not shake, whenever it is use, and cleaning and skin irritation of the skin are small.

[0034] Although the process of the aerosol constituent of this invention is further explained to a detail based on an example below, this invention is not limited only to this example.

[0035] As an example 1 (A) component, the myristic-acid isopropyl 5 section and the 99% ethanol 30 section, The purified water 15 section is used as a (B) component. And in the proof-pressure container for aerosol (maximum injection quantity: 200ml) (A) After being filled up in order of the component and the (B) component and mixing, were filled up with the wood ether 50 section as a (C) component, and **** lightly, it was made to dissolve, and the aerosol constituent as a hair spray for glazing was obtained. The internal pressure at this time is at 25 degrees C. 3.8 kg/cm² and G It adjusted.

[0036] Although layer separation was caused in the phase of an undiluted solution when

the appearance was observed and the condition of the undiluted solution of the phase before preparing an aerosol constituent, and the condition one day after [of the obtained aerosol constituent] preparation were investigated visually, layer separation was not accepted in the obtained constituent, but it had become a uniform solution. Moreover, the uniform condition was maintained when the condition of a constituent was investigated like the above, after leaving this constituent for 30 days at a room temperature.

[0037] When the obtained aerosol constituent was sprayed on the hair and the glazing effectiveness was investigated, it turned out that the part which sprayed this aerosol constituent will be in the condition of fascinating hair as compared with other parts, and it has the glazing effectiveness excellent in this aerosol constituent.

[0038] Moreover, as a property of the obtained aerosol constituent, about cleaning of the concordance to the hair, a feeling of stickiness, and the skin, and a stimulus of the skin, 5g of aerosol constituents was sprayed on the head (hair) of the panelist of 50 man and woman who extracted at random, and it evaluated in accordance with the following valuation bases respectively.

[0039] (Valuation basis)

(b) A:40 or more concordance to the hair sensed that concordance was good.

B:30-39 persons sensed that concordance was good.

C:20-29 persons sensed that concordance was good.

D:10-19 persons sensed that concordance was good.

Only E:9 or less persons sensed that concordance was good.

[0040] (b) A:9 or less feeling of stickiness was sticky, and it was sensed that there was admiration.

B:10-19 persons were sticky, and it was sensed that there was admiration.

C:20-29 persons were sticky, and it was sensed that there was admiration.

D:30-39 persons were sticky, and it was sensed that there was admiration.

E:40 or more persons were sticky, and it was sensed that there was admiration.

[0041] (c) A:9 or less cleaning of the skin sensed that the skin was degreased.

B:10-19 persons sensed that the skin was degreased.

C:20-29 persons sensed that the skin was degreased.

D:30-39 persons sensed that the skin was degreased.

E:40 or more persons sensed that the skin was degreased.

[0042] (d) A:9 or less stimuli of the skin sensed the stimulus for the skin.

B:10-19 persons sensed the stimulus for the skin.

C:20-29 persons sensed the stimulus for the skin.

D:30-39 persons sensed the stimulus for the skin.

E:40 or more persons sensed the stimulus for the skin.

[0043] The result of the condition of the undiluted solution of the phase before preparing an aerosol constituent, the condition of the obtained aerosol constituent, and the equipment monitor test of each property is shown in Table 1.

[0044] The condition of the undiluted solution of the phase before having changed the loadings of examples 2-5 and the example 1 of a comparison - 4 each component as shown in Table 1, and also preparing an aerosol constituent like an example 1 and preparing an aerosol constituent like an example 1, and the acquired condition of an aerosol constituent were observed, and the equipment monitor test of each property was performed. The result is shown in Table 1.

[0045] In addition, the aerosol constituents of examples 2-5 were the thing of an example 1, and a thing which has the similarly excellent glazing effectiveness.

[0046] It is a salicylic-acid glycol as an example 6 (A) component. The 4.5 sections, the l-menthol 11 section, and the 95%8-acetylation cane-sugar denaturation ethanol 12.5 section, The purified water 12 section is used as a (B) component. And in the proof-pressure container for aerosol (maximum injection quantity: 200ml) (A) After being filled up in order of the component and the (B) component and mixing, were filled up with the wood ether 60 section as a (C) component, and **** lightly, it was made to dissolve, and the aerosol constituent as an antiphlogistic sedative drug was obtained. The internal pressure at this time is at 25 degrees C. 3.8 kg/cm² and G It adjusted.

[0047] The condition of the undiluted solution of the phase before preparing an aerosol constituent, and the acquired condition of an aerosol constituent were observed like the example 1. The result is shown in Table 2.

[0048] When the obtained aerosol constituent was sprayed on the inflammation part of the overarm section next and the resolution analgesic effect was investigated, it turned out that inflammation is subsided and this aerosol constituent has a resolution analgesic effect.

[0049] Moreover, as a property of the obtained aerosol constituent, about cleaning of the concordance to the skin, a feeling of stickiness, and the skin, and a stimulus of the skin, 5g of aerosol constituents was sprayed on the overarm section of the panelist of 50 man and woman who extracted at random, and it evaluated in accordance with the same valuation basis (however the valuation basis of the concordance to the skin is the same as the valuation basis of the concordance to said hair) as an example 1 respectively. The result is shown in Table 2.

[0050] The condition of the undiluted solution of the phase before having changed the loadings of example 7 each component as shown in Table 2, and also preparing an aerosol constituent like an example 6 and preparing an aerosol constituent like an example 6, and the acquired condition of an aerosol constituent were observed, and the equipment monitor test of each property was performed. The result is shown in Table 2.

[0051] In addition, these aerosol constituents were the thing of an example 6, and a thing which has a resolution analgesic effect similarly.

[0052]

[Table 1]

表 1

実施 番号	組成（配合量（部））				原液の 状態	組成物の状態		特 性			
	(A) 成分		(B) 成分	(C) 成分		1 日後	30 日後	頭髮に 対する なじみ	べたつき 感	皮膚の 脱脂	皮膚の 刺激
	ミリスチン酸 イソプロピル	99% エタノール	精製水	ジメチル エーテル							
1	5	30	15	50	分離	均一	均一	A	A	A	A
2	5	20	15	60	分離	均一	均一	A	A	A	A
3	5	13	12	70	分離	均一	均一	A	A	A	A
4	5	25	20	50	分離	均一	均一	A	A	A	A
5	5	35	10	50	分離	均一	均一	A	A	A	A
比較例 1	5	5	30	60	分離	分離	分離	D	B	B	B
2	5	5	40	50	分離	分離	分離	E	B	A	B
3	40	12	8	40	分離	分離	分離	B	E	A	C
4	5	35	40	20	分離	分離	分離	C	D	A	A

[0053]

[Table 2]

表 2

実施例 番号	組 成（ 配 合 量（ 部 ） ）					原液の 状 態	組 成 物 の 状 態		特 性			
	(A) 成 分			(B)成分	(C) 成分		1 日 後	30 日 後	皮膚に 対する なじみ	べたつき 感	皮膚の 脱 脂	皮膚の 刺 激
	サリチル酸 グリコール	ℓ - メントール	95%8-アセチ ル化シヨ糖変 性エタノール	精製水	ジメチル エーテル							
6	4.5	11	12.5	12	60	分離	均一	均一	A	A	A	A
7	2.5	6	6.5	15	70	分離	均一	均一	A	A	A	A

[0054] It turns out that it excels in various physical properties -- it does not have generating of layer separation etc. even if the aerosol constituent obtained by the process of this invention is the case where it saves for a long period of time, and its concordance is good and it does not have cleaning of a feeling of stickiness, and the skin, and a stimulus of the skin -- so that clearly from the result shown in Table 1 and 2.

[0055]

[Effect of the Invention] According to the process of this invention, even if saved for a long period of time, it is homogeneous, it is hard to start layer separation, and whenever it is use, even if it does not shake, the contents of a uniform presentation can be taken out as it is, there are no cleaning and skin irritation of the skin, for example, it can deal in the aerosol constituent which can be used suitable for broad fields, such as cosmetics, drugs, and quasi drugs.

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TECHNICAL FIELD

[Industrial Application] This invention relates to the process of an aerosol constituent. It is related with the process of the aerosol constituent which can be used suitable for cosmetics, drugs, quasi drugs, etc. in more detail.

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PRIOR ART

[Description of the Prior Art] Conventionally, oil components, such as synthetic oil and vegetable oil, such as fatty acid ester and silicon oil, and animal oil, are blended with cosmetics for the purpose of the grant of permeability or gloss to the skin, and improvement in a feeling of use. Moreover, oil components, such as a salicylic-acid glycol, acetic-acid dl-alpha-tocopherol, l-menthol, and dl-camphor, are blended with drugs or quasi drugs as a drug effect component.

[0003] However, although it is desirable to blend water in order for there to be a problem that the skin is degreased and to prevent cleaning, when it applies to the skin when propellants, such as liquefied petroleum gas, are blended with these oil component and an alcoholic component and it considers as an aerosol constituent, there is a problem that an oil component etc. and water will dissociate.

[0004] The approach of blending a surface active agent and making it into a water-in-oil type emulsion or an oil-in-water type emulsion as an approach of stabilizing the constituent containing such an oil component, an alcoholic component, and water in the uniform condition, is learned.

[0005] However, the emulsion with which the surface active agent was blended In order for there to be problems, like the stimulus to the stickiness at the time of use or the skin is large and to use it as aerosol further The aerosol constituent which blended propellants, such as liquefied petroleum gas, with this emulsion When saved for a long period of time, contents cause layer separation, it may need to fully shake beforehand at every use, and the problem that it is difficult to apply only the same amount to homogeneity repeatedly is at every use of a drug effect component by drugs especially.

[0006]

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EFFECT OF THE INVENTION

[Effect of the Invention] According to the process of this invention, even if saved for a long period of time, it is homogeneous, it is hard to start layer separation, and whenever it is use, even if it does not shake, the contents of a uniform presentation can be taken out as it is, there are no cleaning and skin irritation of the skin, for example, it can deal in the aerosol constituent which can be used suitable for broad fields, such as cosmetics, drugs, and quasi drugs.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] This invention is made in view of said conventional technique, and does not have cleaning or skin irritation of the skin, moreover layer separation cannot start it easily, whenever it is use, even if it does not shake, it is uniform and it aims at offering the process of the aerosol constituent which can take out the contents of a desired presentation as it is.

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MEANS

[Means for Solving the Problem] Namely, the undiluted solution with which this invention consists of (A) oil component or an oil component, an alcoholic component 30 - 15 - 70 % of the weight of 85-% of the weight and (B) water, And it consists of (C) wood ether and is the total quantity 100 of said undiluted solution and wood ether. The rate of an undiluted solution to the weight section 2 - 60 weight section, After making the rate of wood ether into 40 - 98 weight section and mixing the aforementioned (A) component and the aforementioned (B) component, it is related with the process of the aerosol constituent characterized by mixing the aforementioned (C) component to this.

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EXAMPLE

[Function and Example(s)] According to the process of this invention, in an undiluted solution phase, the aerosol constituent which the oil component which carries out layer separation or an oil component, an alcoholic component, and water dissolved mutually into wood ether at homogeneity is obtained by mixing wood ether by the specific blending ratio of coal to the oil component of the specific blending ratio of coal or an oil component and an alcoholic component, and the undiluted solution that consists of water. [0009] In the process of the aerosol constituent of this invention, the undiluted solution which consists of the (A) component and the (B) component which are explained below is used.

[0010] The aforementioned (A) components are an oil component or an oil component, and an alcoholic component.

[0011] It is desirable that it is a component for said oil component giving the permeability and gloss over the skin, raising a feeling of use, and giving a pharmacological action, and it is at least one sort chosen from the group which this oil component becomes from fatty acid ester, silicon oil, the oil solubility pharmacological activity matter, vegetable oil, and animal oil although there will be no limitation especially if it can use for such a purpose.

[0012] As an example of said oil component, for example Myristic-acid isopropyl, Myristic-acid Millis Chill, myristic-acid octyldodecyl, palmitic-acid isopropyl, Butyl stearate, ethyl linolate, linolic acid isopropyl, Fatty acid ester, such as adipic-acid diisopropyl, diisopropyl sebacate, and sebacic-acid diethyl; A methylphenyl polysiloxane, Silicon oil, such as octamethylcyclotetrasiloxane and decamethyl cyclopentasiloxane; Dl-camphor, L-menthol, a salicylic-acid glycol, a methyl salicylate, the acetic-acid dl-alpha-tocopherol, A eucalyptus oil, a date, lidocaine, crotamiton, diphenhydramine, Oil solubility pharmacological activity matter, such as vitamin oil; Olive oil, an almond oil, Jojoba oil, peanut oil, castor oil, palm oil, palm oil, safflower oil, Sunflower oil, cotton seed oil, an avocado oil, camellia oil, corn oil, a wheat germ oil, Rice bran oil, cacao butter, sesame oil, Oenotherae Biennis oil, safflower oil, a sasanqua oil, soybean oil, Vegetable oil, such as rapeseed oil, a cull navarho, a MAKADEMIAN nuts oil, apricot kernel oil, and a grape seed oil; Lanolin and a lanolin derivative, Animal oil, such as a turtle oil, a mink oil, yellow bees wax, squalene, squalane, pristane, and a yolk oil, etc. is raised, and these are independent, or they mix two or more sorts and are used.

[0013] When an oil component with high viscosity is diluted and two or more sorts of oil

components are used, said alcoholic component is a component for mixing and dissolving these in homogeneity, and especially if it can use for such a purpose, it will not have limitation.

[0014] Ethanol, isopropanol, etc. are raised, for example, and ethanol is usually used and can be easy to use native ethanol, various denaturation ethanol, etc. as an example of said alcoholic component. These are independent, or mix two or more sorts and are used.

[0015] Moreover, since said alcoholic component comes to produce layer separation when moisture is contained so much, the concentration of the thing of 95% or more of ***** is desirable [a component] 90% or more.

[0016] (A) the loadings of the alcoholic component in a component -- oil component It is desirable that they are the 3000 or less sections and the 1000 or less section of ***** to the 100 sections (the weight section and the following -- the same). When the loadings of this alcoholic component surpass the 3000 sections, there is an inclination for the effectiveness by having used the oil component to no longer be discovered fully.

[0017] (A) The loadings in the undiluted solution of a component are 40 - 80 % of the weight preferably 30 to 85% of the weight. In becoming easy to separate the aerosol constituent obtained when the loadings of this (A) component are less than 30 % of the weight and surpassing 85 % of the weight, when an aerosol constituent is applied to the skin, it becomes easy to start cleaning of the skin.

[0018] When the water which is the aforementioned (B) component applies an aerosol constituent to the skin, it is a component for preventing degreasing the skin, there is no limitation especially in this water, for example, purified water, such as distilled water and ion exchange water, etc. can be used for it.

[0019] (B) The loadings in the undiluted solution of a component are 20 - 60 % of the weight preferably 15 to 70% of the weight. When the loadings of this (B) component are less than 15 % of the weight and the aerosol constituent obtained is applied to the skin, in becoming easy to start cleaning of the skin and surpassing 70 % of the weight, it becomes easy to separate an aerosol constituent.

[0020] Within limits from which the purpose of this invention is not prevented other than these (A) components and the (B) component according to an application in various active principles, a solvent, etc., it can be suitably chosen as the undiluted solution used by this invention, and can use for it.

[0021] As an example of said active principle, an astringent active principle, a hair spray active principle, a baby oil active principle, a pawl protection active principle, a hidroscheisis active principle, a hair tonic active principle, an aftershave lotion active principle, a hand lotion active principle, a suntan lotion active principle, a body lotion active principle, an antipruritic active principle, an antiphlogistic sedative drug active principle, a hair tonic active principle, a germicide active principle, perfume, etc. are raised, for example.

[0022] Although the loadings of the active principle in the undiluted solution in the case of using said active principle differ according to the class of the active principle, it is desirable to adjust so that the effectiveness by having blended this active principle may fully be discovered and it may get. Since these loadings have the inclination for compatibility with propellants etc. and stability to fall when many [too], it is preferably desirable to adjust so that it may become about 10 or less % of the weight still more preferably about 15 or less % of the weight.

[0023] As an example of said solvent, polyhydric alcohol, such as propylene glycol, ethylene glycol, diethylene-glycol, triethylene glycol, glycerol, 1, and 3-butylene glycol, etc. is raised, for example.

[0024] As for the loadings of the solvent in the undiluted solution in the case of using said solvent, it is preferably desirable to adjust so that it may become about 15 or less % of the weight still more preferably about 20 or less % of the weight.

[0025] In this invention, wood ether ((C) component) is used as propellants.

[0026] The total quantity 100 of said undiluted solution and wood ether The rate of an undiluted solution to the section is made into the two to 60 section, and the ten to ***** 50 section, and let the rates of wood ether be the 40 to 98 section, and the 50 to ***** 90 section. The total quantity 100 of an undiluted solution and wood ether When an undiluted solution and wood ether separate into a bilayer, and a uniform aerosol constituent is no longer obtained, when the rate of wood ether to the section is the less than 40 sections, and surpassing the 98 sections, while the amount of an undiluted solution decreases too much relatively and it becomes impossible to attain the purpose of this invention, the amount of wood ether increases relatively and is not desirable in respect of safety.

[0027] In addition, in this invention, hydro fluorocarbon, such as F12, F114, and F134 a, liquefied petroleum gas (mixture, such as a propane, i-butane, and n-butane), etc. can be used as propellants besides said wood ether.

[0028] As for the component used as propellants other than these wood ether, it is desirable to use at 10 or less % of the weight of ***** 20 or less % of the weight of the total quantity which can use in the range which an undiluted solution and propellants do not divide into a bilayer instead of a part of an oil component, water, alcoholic component, and wood ether, and an oil component, water, an alcoholic component, and wood ether can specifically use, in order to deal in the constituent which may discover a desired property.

[0029] In the process of this invention, after dividing into two processes the (A) component and the (B) component which constitute an undiluted solution, carrying out sequential restoration at the proof-pressure container for aerosol and mixing this component, an aerosol constituent is obtained by filling this up with the propellants which are the (C) components, and mixing.

[0030] The 25-degree C internal pressure of the aerosol constituent which what is usually used can be used as said proof-pressure container for aerosol, and is the above, and is made and obtained is -G -G and 3-5kg/cm² of ***** 2-6kg/cm². Adjusting so that it may become is desirable.

[0031] What is necessary is just to usually mix with the (B) component, since these are beforehand mixed to homogeneity when the aforementioned (A) component consists of an oil component and an alcoholic component.

[0032] In addition, when using said active principle and solvent, in the (A) component or the (B) component, it may add beforehand and you may mix, and after these mix the (A) component and the (B) component, it may add and they may be mixed. Moreover, when using together wood ether and propellants other than this wood ether, after mixing propellants other than this wood ether with wood ether beforehand, mixing with an undiluted solution is desirable.

[0033] The aerosol constituent obtained by the process of this invention can be used

suitable for broad fields for example, such as cosmetics, drugs, and quasi drugs, since the contents of a uniform presentation can be taken out as it is even if it is homogeneous even if saved for a long period of time, it is hard to start layer separation, and it does not shake, whenever it is use, and cleaning and skin irritation of the skin are small.

[0034] Although the process of the aerosol constituent of this invention is further explained to a detail based on an example below, this invention is not limited only to this example.

[0035] As an example 1 (A) component, the myristic-acid isopropyl 5 section and the 99% ethanol 30 section, The purified water 15 section is used as a (B) component. And in the proof-pressure container for aerosol (maximum injection quantity: 200ml) (A) After being filled up in order of the component and the (B) component and mixing, were filled up with the wood ether 50 section as a (C) component, and **** lightly, it was made to dissolve, and the aerosol constituent as a hair spray for glazing was obtained. The internal pressure at this time is at 25 degrees C. 3.8 kg/cm² and G It adjusted.

[0036] Although layer separation was caused in the phase of an undiluted solution when the appearance was observed and the condition of the undiluted solution of the phase before preparing an aerosol constituent, and the condition one day after [of the obtained aerosol constituent] preparation were investigated visually, layer separation was not accepted in the obtained constituent, but it had become a uniform solution. Moreover, the uniform condition was maintained when the condition of a constituent was investigated like the above, after leaving this constituent for 30 days at a room temperature.

[0037] When the obtained aerosol constituent was sprayed on the hair and the glazing effectiveness was investigated, it turned out that the part which sprayed this aerosol constituent will be in the condition of fascinating hair as compared with other parts, and it has the glazing effectiveness excellent in this aerosol constituent.

[0038] Moreover, as a property of the obtained aerosol constituent, about cleaning of the concordance to the hair, a feeling of stickiness, and the skin, and a stimulus of the skin, 5g of aerosol constituents was sprayed on the head (hair) of the panelist of 50 man and woman who extracted at random, and it evaluated in accordance with the following valuation bases respectively.

[0039] (Valuation basis)

(b) A:40 or more concordance to the hair sensed that concordance was good.

B:30-39 persons sensed that concordance was good.

C:20-29 persons sensed that concordance was good.

D:10-19 persons sensed that concordance was good.

Only E:9 or less persons sensed that concordance was good.

[0040] (b) A:9 or less feeling of stickiness was sticky, and it was sensed that there was admiration.

B:10-19 persons were sticky, and it was sensed that there was admiration.

C:20-29 persons were sticky, and it was sensed that there was admiration.

D:30-39 persons were sticky, and it was sensed that there was admiration.

E:40 or more persons were sticky, and it was sensed that there was admiration.

[0041] (c) A:9 or less cleaning of the skin sensed that the skin was degreased.

B:10-19 persons sensed that the skin was degreased.

C:20-29 persons sensed that the skin was degreased.

D:30-39 persons sensed that the skin was degreased.

E:40 or more persons sensed that the skin was degreased.

[0042] (d) A:9 or less stimuli of the skin sensed the stimulus for the skin.

B:10-19 persons sensed the stimulus for the skin.

C:20-29 persons sensed the stimulus for the skin.

D:30-39 persons sensed the stimulus for the skin.

E:40 or more persons sensed the stimulus for the skin.

[0043] The result of the condition of the undiluted solution of the phase before preparing an aerosol constituent, the condition of the obtained aerosol constituent, and the equipment monitor test of each property is shown in Table 1.

[0044] The condition of the undiluted solution of the phase before having changed the loadings of examples 2-5 and the example 1 of a comparison - 4 each component as shown in Table 1, and also preparing an aerosol constituent like an example 1 and preparing an aerosol constituent like an example 1, and the acquired condition of an aerosol constituent were observed, and the equipment monitor test of each property was performed. The result is shown in Table 1.

[0045] In addition, the aerosol constituents of examples 2-5 were the thing of an example 1, and a thing which has the similarly excellent glazing effectiveness.

[0046] It is a salicylic-acid glycol as an example 6 (A) component. The 4.5 sections, the 1-menthol 11 section, and the 95%8-acetylation cane-sugar denaturation ethanol 12.5 section, The purified water 12 section is used as a (B) component. And in the proof-pressure container for aerosol (maximum injection quantity: 200ml) (A) After being filled up in order of the component and the (B) component and mixing, were filled up with the wood ether 60 section as a (C) component, and **** lightly, it was made to dissolve, and the aerosol constituent as an antiphlogistic sedative drug was obtained. The internal pressure at this time is at 25 degrees C. 3.8 kg/cm² and G It adjusted.

[0047] The condition of the undiluted solution of the phase before preparing an aerosol constituent, and the acquired condition of an aerosol constituent were observed like the example 1. The result is shown in Table 2.

[0048] When the obtained aerosol constituent was sprayed on the inflammation part of the overarm section next and the resolution analgesic effect was investigated, it turned out that inflammation is subsided and this aerosol constituent has a resolution analgesic effect.

[0049] Moreover, as a property of the obtained aerosol constituent, about cleaning of the concordance to the skin, a feeling of stickiness, and the skin, and a stimulus of the skin, 5g of aerosol constituents was sprayed on the overarm section of the panelist of 50 man and woman who extracted at random, and it evaluated in accordance with the same valuation basis (however the valuation basis of the concordance to the skin is the same as the valuation basis of the concordance to said hair) as an example 1 respectively. The result is shown in Table 2.

[0050] The condition of the undiluted solution of the phase before having changed the loadings of example 7 each component as shown in Table 2, and also preparing an aerosol constituent like an example 6 and preparing an aerosol constituent like an example 6, and the acquired condition of an aerosol constituent were observed, and the equipment monitor test of each property was performed. The result is shown in Table 2.

[0051] In addition, these aerosol constituents were the thing of an example 6, and a thing which has a resolution analgesic effect similarly.

表 1

実施例 番号	組成（配合量（部））				原液の 状態	組成物の状態		特 性			
	(A) 成分		(B) 成分	(C) 成分		1 日後	30 日後	頭髮に 対する なじみ	べたつき 感	皮膚の 脂 脱	皮膚の 刺 激
	ミリスチン酸 イソプロピル	99% エタノール	精製水	ジメチル エーテル							
1	5	30	15	50	分離	均一	均一	A	A	A	A
2	5	20	15	60	分離	均一	均一	A	A	A	A
3	5	13	12	70	分離	均一	均一	A	A	A	A
4	5	25	20	50	分離	均一	均一	A	A	A	A
5	5	35	10	50	分離	均一	均一	A	A	A	A
比較例 1	5	5	30	60	分離	分離	分離	D	B	B	B
2	5	5	40	50	分離	分離	分離	E	B	A	B
3	40	12	8	40	分離	分離	分離	B	E	A	C
4	5	35	40	20	分離	分離	分離	C	D	A	A

表 2

実施例 番号	組 成（ 配 合 量 （ 部 ） ）					原液の 状 態	組 成 物 の 状 態		特 性			
	（ A ） 成 分			（ B ） 成 分	（ C ） 成 分		1 日 後	30 日 後	皮膚に 対する なじみ	べたつき 感	皮膚の 脱 脂	皮膚の 刺 激
	サリチル酸 グリコール	ℓ - メントール	95%8-アセチ ル化シヨ糖変 性エタノール	精製水	ジメチル エーテル							
6	4.5	11	12.5	12	60	分離	均一	均一	A	A	A	A
7	2.5	6	6.5	15	70	分離	均一	均一	A	A	A	A

[0054] It turns out that it excels in various physical properties -- it does not have generating of layer separation etc. even if the aerosol constituent obtained by the process of this invention is the case where it saves for a long period of time, and its concordance is good and it does not have cleaning of a feeling of stickiness, and the skin, and a stimulus of the skin -- so that clearly from the result shown in Table 1 and 2.

[Translation done.]